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GOVERNOR

STATE OF MICHIGAN

# DEPARTMENT OF NATURAL RESOURCES

LANSING



REBECCA A. HUMPHRIES  
DIRECTOR

February 27, 2009

The Honorable Michelle McManus, Chair  
Senate Appropriations Subcommittee on  
Natural Resources  
S-2 Capitol Building  
P.O. Box 30036  
Lansing, Michigan 48909-7536

The Honorable Michael Lahti, Chair  
House Appropriations Subcommittee on  
Natural Resources  
House Office Building  
P.O. Box 30014  
Lansing, Michigan 48909-7514

Dear Senator McManus and Representative Lahti:

The following report on the status of the permits and water level of Muskrat Lake is provided pursuant to Section 226, PA 252 of 2008.

In May of 2007, the Clinton County Conservation District submitted a Department of Environmental Quality (DEQ) permit application for the project. DEQ considered the application incomplete due to a lack of documentation from the landowner, the Department of Natural Resources (Department).

In December 2007, the Department's Wildlife and Fisheries Divisions agreed to a compromise project and forwarded a letter to the conservation district authorizing them to apply for the permit on Department lands. The final design was a rock arch rapids which incorporated fish passage and minimal water flows and minimal maintenance due to the rock construction.

The permit was denied by DEQ on April 18, 2008, based on input from the public.

The conservation district contested the permit denial. Since then, DEQ, the applicant, and his consultants, have met periodically in an effort to seek an informal resolution of the appeal. As of January 12, 2009, DEQ has not received a response from the applicant. The Department will upgrade the boating access site once the lake level has been determined.

An estimate of water levels (based on historic aerial photos and recent measurements) is provided below. During most of the year, water levels are below the last pad on the ramp. During flood events, water levels peak near the top pad of the ramp.

## Muskrat Lake Water Level Estimates (1950-2009)

Date	Water Location	Approx. Elevation*	Comment
06/18/1950		~758	Comparison of air photo to USGA Quad
10/28/1956		~758	Comparison of air photo to USGA Quad
06/16/1964		~757.5	Comparison of air photo to USGA Quad
1965		758	USGS 7.5 Minute Quadrangle Map

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Muskrat Lake Water Level  
Page Two  
February 27, 2009

07/17/1973		~758	Comparison of air photo to USGA Quad
08/21/1978		~758	Comparison of air photo to USGA Quad
1985		~759	Comparison of air photo to USGA Quad
04/02/1991		~760	Comparison of air photo to USGA Quad
05/07/1993		~762	Comparison of air photo to USGA Quad, highest water in any air photo
05/12/1995		~759	Comparison of air photo to USGA Quad
04/23/1998		~ 759	Comparison of air photo to USGA Quad
07/11/1999		~758	Comparison of air photo to USGA Quad
10/24/2003	2.4' below 8th slab of ramp	~759.6	NRCS measurement-assuming 8th slab is 760
05/24/2004	bottom of top pad, east end	~761.8	Peak of flood after record May rainfalls-fell about 0.5' daily afterward
Leaf-On 2005		~757.5	Comparison of air photo to USGA Quad
12/08/2009	17' 5" south of SE corner of bottom pad	~757	
12/28/2008	1.5" above top of NE corner of top pad	~761.8	1 day after thaw, with significant flooding
01/02/2009	23 ' south of top of NE corner of top pad	~759	6 days after thaw-ice on slope
01/09/2009		757.87	DEQ measurement

\*Feet above National Geodetic Vertical Datum of 1929

If you have questions, please contact me.

Sincerely,

Sharon M. Schafer, Chief  
Budget and Support Services  
517-335-3276

cc: Senate Appropriations Subcommittee Members  
House Appropriations Subcommittee Members  
Ms. Jessica Runnels, Senate Fiscal Agency  
Dr. Kirk Lindquist, House Fiscal Agency  
Mr. Robert Emerson, State Budget Director, Department of Management and Budget (DMB)  
Mr. Jacques McNeely, DMB  
Ms. Jennifer Harrison, DMB  
Director Rebecca Humphries, DNR  
Ms. Arminda Koch, Resource Management Deputy, DNR  
Mr. Rodney Stokes, Chief of Staff, DNR  
Mr. Daniel Eichinger, Legislative Liaison, DNR  
Dr. Russ Mason, DNR